Eight central piers were constructed to support the dome. These are seen at the base of the metal framing for the rotunda. Composed of reinforced concrete that enclosed the structured steel, these columns are sheathed in scagliola inside the rotunda.

About the History of Idaho's Capitol

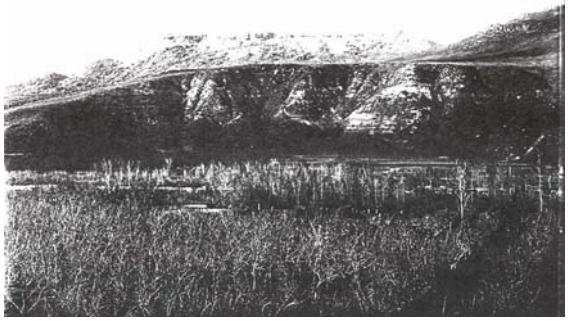
The Construction of the Idaho State Capitol

Simultaneous to the selection of an architect, the Capitol Commission established the position of Superintendent of Construction. On June 3, 1905, Herbert E. Quigley, whose experience included work on Boise's Federal Building accepted the appointment as Superintendent, charged with overseeing the Capitol's construction.[60] While the architects were to supply working drawings and specifications to inform contract bids, Quigley's responsibilities included the subsequent awarding of contracts and supervision of the work.[61] Quigley was held accountable to the Commission, as the Commission gave final approval to the hiring of sub-contractors and suppliers of materials for each construction phase.[62] To facilitate Quigley's command of the project, the arsenal building standing to the rear of the Territorial Capitol was remodeled and served as Quigley's project office.[63]

With the administration in place, the first phase of construction commenced during the summer of 1905. On July 11, 1905, the Capitol Commission authorized Quigley to proceed with clearing the Capitol site.[64] The contract for scraper work and deep excavation was let to Rankin & Jackson;[65] work was implemented, in part, with the use of state-supplied convict labor.[66] The specifications called for an excavation three feet larger on all sides than the dimensions of the foundation.[67] The excavation was to extend down to river gravel, at a level about 20 feet beneath the surface[68] to provide a stable base for setting the Portland cement footings.[69] The loam and gravel excavated was kept in separate piles so that the loam could be used in grading up around the building after completion.[70] During the fall and winter of 1905, the Capitol's footings and foundation walls, which taper at 8 feet wide at the base to 3 feet at the top, were poured into prepared forms. To hasten the foundation construction, the Capitol Commission purchased a cement mixer from Norman B. Livermore & Co., a San Francisco machinery manufacturer.[71] The concrete was to be deposited in layers not exceeding 2 feet in height.[72] Approximately one year after excavation began, the foundation for the central portion was nearly complete.[73] The first course of stone, approximately 2 feet in height, was placed on the foundation.[74] The stone was a Montana granite supplied by James Welch, a quarryman from Butte, for the sum of $5,412.50 plus the cost of freight shipping.[75] The Capitol Construction Company was hired to haul, set and reinforce the granite course with brick.[76]

On October 22, 1906, the Capitol Building Commission approved the purchase of Table Rock Quarry, located at the outskirts of Boise, from the Jellison Brothers for the sum of $20,000.[77] The quarry would provide the sandstone used in the exterior sheathing of the building. Once again, convict labor was used not only to quarry the stone, but also to construct a road

connecting the quarry with a main road to Boise to facilitate the transportation of materials.[78] The Commission justified the use of convict labor stating, "It would effect a considerable savings in the cost of the building, and at the same time would do away with one source of considerable contention and trouble between the Superintendent and contractors."[79] This concern was most likely precipitated by Quigley's frustration with the chronic delays in James Welch's delivery of granite from Montana. The final carload from Welch family finally arrived in Boise on October 21, 1907 after a year of dealing with delays caused, as Welch claimed, by bad weather and labor disturbance at his quarry.[80] To facilitate lifting and placing large amounts of stone and steel, many individual pieces of which weighed upwards of five tons, the Commission authorized the purchase of hoisting machinery and derricks. Because of the number of different contractors to be involved, the Commission thought it most economical to secure this equipment for use by the various contractors. Early in 1908, the Commission began receiving bids for one guy derrick, two stiff leg derricks, two electric hoists and a compressor outfit for pneumatic riveting of all steelwork. It was planned the machinery be sold at the time of the Capitol's completion.[81]



The sandstone of the Capitol was quarried from the foothills that surround Boise. This panoramic view shows the face of Table Rock Quarry, purchased by the state to supply stone for the Capitol's construction

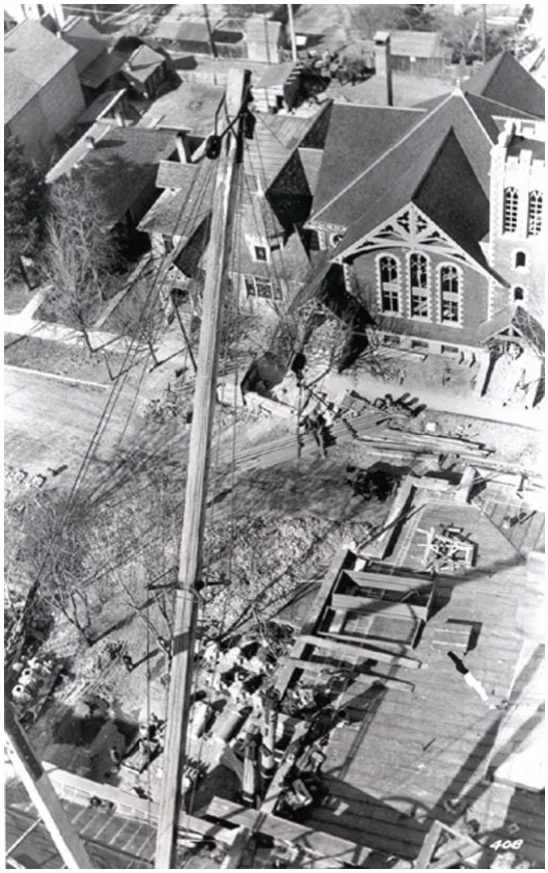
Rock was cut into coarse blocks at table Rock Quarry and transported to the Capitol construction site, where it was finished and readied for placement.

The Commission decided to let four separate contracts for steel and four for the exterior masonry; Tourtellotte & Company prepared their documents with this end in mind. On September 14, 1907, the Commission approved the bid of the Boise firm, Storey & Murphy, to complete the masonry and cut-stone work for the first and second stories. To succeed the Capitol Construction Company, the Commission felt Storey & Murphy "[were] the only ones in Boise properly equipped with machinery to handle this class of work."[82] The subsequent contract for masonry work, Contract #3, was let to Storey & Murphy on October 5, 1909. They were to supply all masonry work from the second story floor beams to the base of the dome, including the cutting and placing of 225 modillions, 225 soffit panels for the main cornice and some 44 decorative Corinthian modillions. Sub-contractor, Henry A. Vernon, was hired to quarry and deliver the sandstone for this contract.[83] He continued this work for the dome construction under the general contractor, James Stewart & Company.[84] As the only bidders for masonry Contract #4, Storey & Murphy were awarded the contract to construct the granite base, copings, steps, platforms, seats, ball ornaments, concrete foundation and all sandstone work on the main approach at the Jefferson Street Entrance.[85]

Between 1906 and 1911, four contracts for the steelwork of the central portion and dome were

advertised and awarded. These contracts required only the supply of materials and not manual labor. This was due to the Commission's concern that, "the delay in the masonry work [would] necessitate the steel companies keeping employees [in Boise] too long to erect the steel work in small quantities from time to time as the masonry work progressed."[86] Because only "half of the [Capitol's] floor beams are wall bearing, they can only be erected as fast as any bearing and outside walls are completed."[87] This is in contrast to buildings "where all floor beams rest on steel columns or girders, therefore the entire steel work is erected ahead of the masonry walls."[88] Informing bidders of this scheduling challenge, the first contract included the beams, columns and lintels for the grade and first stories; the second contract was for the steel structure of the second and third stories, the third contract included the remaining steel up to the base of the dome and,[89] lastly, the fourth contract was for the steel superstructure of the dome.[90]

Three different companies were employed by the Commission to complete these contracts. Contract #1 and #2 were let to the American Bridge Company of New York City, Contract #3 was awarded to Minneapolis Steel & Machinery Company,[91] and the James J. Burke & Co. of Salt Lake City, Utah, received the contract for the dome.[92] The specifications for the steelwork of the dome included the columns, lintels, dome trusses and their supports, dome ties, staircases and the rotunda ceiling.[93] The steel was specified to have a tensile strength of 60,000 to 68,000 pounds per square inch with an elastic limit not to be less than half the tensile strength. No steel used in the building was to contain more than 5 percent phosphorous.[94] By January 1, 1909, the grade, first and second stories, rising to a height of 42 feet, of stone and brick masonry were complete and "the immense steel columns and girders were in position up to the base of the dome, a height of some 76 feet."[95] By the time the Capitol Commission issued its Third Report in January 1911, the brick and stone masonry was complete to the height of 87 feet, or to the circular base of the colonnade of the dome. In addition, the Jefferson Street approach had been completed, although delivery delays postponed the anticipated December 1, 1910 contract completion date.[96]



Derricks, purchased by the state, facilitated construction of the Capitol's central portion. They were used to lift the heavy loads of stone and steel in the construction of the dome.

In early 1911, the steelwork was in place up to the roof trusses of the central portion and the Commission was taking steps to receive bids on steel Contract #4 for the steel trusses, girders and cylinder of the dome.[97] As an economically minded move, during the spring and summer of 1911, an outside architect was consulted to advise the local architects and the Commission concerning proposed changes to the design. The alterations discussed included reducing the size of the dome or omitting it altogether. Never named explicitly in documentation, the consultants were termed simply "eastern

architects" by the Boise press. As a result of their recommendations, the proposed changes that would have resulted in the modification of the dome were never carried out, however, the Commission agreed to several minor changes in the interior arrangement of spaces. Changes were made in the configuration of some partition walls and the Supreme Court was relocated from the first to the second floor.[98]

The Idaho Daily Statesman reported on June 9, 1912 that within a few days the steelworkers would complete the structural portions of the dome, satisfying the fourth and final steel contract.[99] Once the steel structure of the dome was in place, a reinforced concrete sheath would be constructed and waterproofed with an asphalt mastic over which terra cotta tiles, intended to match the sandstone in color and supplied by the Gladding-McBean Company, would be placed.[100] The dome structure was to be supported by eight colossal columns, extending down through the building to the foundation. The multiple ribs of the external dome, defined structurally at the top chord of the arched trusses, were attached to steel columns, which comprise the structural core and are expressed on the interior of the rotunda as the massive scagliola columns encircling the space. For additional support, the dome's ribs were to be connected to masonry at 16 additional points.[101]

Footnotes:

[60] "To Build Capitol", *The Idaho Daily Statesman*, 3 June 1905, 5.

[61] "Ten Thousand to Be Paid for Plans and Details of New Capitol", *The Idaho Daily Statesman*, 4 July 1905, 5.

[62,66] Hauck, Eldon, *American Capitols: An Encyclopedia of the State, National and Territorial Capitol Edifices of the United States*, vol. 1 (London: McFarland & Company, Inc., 1991) 54-55.

[63] "To Clear Capitol Grounds", *The Idaho Daily Statesman*, Thursday, 13 July 1905, 5.

[64] "Capitol Commission Meeting Minutes, 11 July 1905, Idaho State Capitol Commission Papers, collection AR 18, box 4 (Boise: Idaho State Historical Society).

[65,74,76,82,87,88,89,91] Report of All the Contracts of the New Capitol Building, 8 February 1909, Idaho State Capitol Commission Papers, collection AR 18, box 4 (Boise: Idaho State Historical Society) 1-16.

[67,69,70,72] John E. Tourtellotte and Co., Synopsis of the Specifications for Central Section of Idaho State Capitol, 1 January 1911, Idaho State Capitol Commission papers, collection AR 18, box 5 (Boise: Idaho State Historical Society) 1-2.

[68] "State Capitol Building", *The Idaho Daily Statesman*, 30 December 1906, 1.

[71] Invoice, Norman B. Livermore & Co., 1 October 1905, Idaho State Capitol Commission Papers, collection AR 18, box 1 (Boise: Idaho State Historical Society).

[73] "Concrete Work on New Capitol Building Nearly Done", *The Idaho Daily Statesman*, 20 June 1906, 5.

[75] "Capitol Commission Meeting Minutes, 1 December 1906, Idaho State Capitol Commission papers, collection AR 18, box 4 (Boise: Idaho State Historical Society).

[77] "Capitol Commission Meeting Minutes, 22 October 1906, Idaho State Capitol Commission papers, collection AR 18, box 4 (Boise: Idaho State Historical Society).

[78] E.L. Whitney, Penitentiary Warden to the Capitol Building Commission, 12 December 1906, Idaho State Capitol Commission Papers, collection AR 18, box 1 (Boise: Idaho State Historical Society).

[79,81,86] Second Biennial Report of the Capitol Building Commission...State of Idaho, 1 January 1909, Idaho State Capitol Commission Papers, collection AR 18, box 4 (Boise:Idaho State Historical Society) 2-4.

[80] "Montana Quarryman Hit Snags in Granite Job for Idaho Capitol", *The Idaho Statesman*, 12 January 1981, 4B.

[83,85,95,96,97] Third Biennial Report of the Capitol Building Commission...State of Idaho, 1 January 1909, Idaho State Capitol Commission Papers, collection AR 18, box 4 (Boise: Idaho State Historical Society) 4-8.

[84,90,92,98] Fourth Biennial Report of the Capitol Building Commission...State of Idaho, 1 January 1911, Idaho State Capitol Commission Papers, collection AR 18, box 4 (Boise:Idaho State Historical Society) 1-19.

[93,101] Tourtellotte & Hummel Architects, Revised Specifications for Steelwork of the Dome of State Capitol Building at Boise, Idaho, Idaho State Capitol Commission papers, collection AR 18, box 5 (Boise: Idaho State Historical Society) 4-8.

[94] John E. Tourtellotte & Co., Specifications for All Steel Work for the Idaho State Capitol, Idaho State Capitol Commission Papers, collection AR 18, box 5 (Boise: Idaho State Historical Society) 3.

[99] "State Capitol is Growing in Beauty", *The Idaho Daily Statesman*, 9 June 1912, 7.

[100] "State Capitol is Growing in Beauty", The Idaho Daily Statesman, 9 June 1912, p.7 and Fourth Biennial Report of the Capitol Building Commission...State of Idaho, 1 January 1911, Idaho State Capitol Commission Papers, collection AR 18, box 4 (Boise:Idaho State Historical Society) 7.